Riboflavin-mediated delivery of a macromolecule into cultured human cells
S.R. Holladay, Z. Yang, M.D. Kennedy, C.P. Leamon, R.J. Lee, M. Jayamani, T. Mason and P.S. Low (USA) 195

Electron spin resonance studies on photosensitized formation of hydroxyl radical by C-phycocyanin from *Spirulina platensis*
S. Zhang, J. Xie, J. Zhang, J. Zhao and L. Jiang (People's Republic of China) 205

TEM investigations of biogenic magnetite extracted from the human hippocampus
P.P. Schultheiss-Grassi, R. Wessiken and J. Dobson (Australia, Switzerland) 212

Isolation and cytotoxic properties of a novel glycoconjugate from corms of saffron plant (*Crocus sativus* L.)
J. Escribano, I. Ríos and J.A. Fernández (Spain) 217

Information for Contributors *ix*

Preface 223

Introduction

Yeast glycosylation – foundations and building blocks
P.W. Robbins (USA) 225

Reviews

Overview of *N*- and *O*-linked oligosaccharide structures found in various yeast species
T.R. Gemmill and R.B. Trimble (USA) 227

The dolichol pathway of *N*-linked glycosylation
P. Burda and M. Aebi (Switzerland) 239

The oligosaccharyltransferase complex from yeast
R. Knauer and L. Lehle (Germany) 259

Processing glycosidases of *Saccharomyces cerevisiae*
A. Herscovics (Canada) 275

Reglucosylation of glycoproteins and quality control of glycoprotein folding in the endoplasmic reticulum of yeast cells
A.J. Parodi (Argentina) 287

Protein *O*-mannosylation
S. Strahl-Bolsinger, M. Gentzsch and W. Tanner (Germany) 297

Asparagine-linked glycosylation in the yeast Golgi
N. Dean (USA) 309

The *KTR* and *MNN1* mannosyltransferase families of *Saccharomyces cerevisiae*
M. Lussier, A.-M. Sdicu and H. Bussey (Canada) 323

Mannosylphosphate transfer to yeast mannan
Y. Jigami and T. Odani (Japan) 335

Yeast sphingolipids
R.C. Dickson and R.L. Lester (USA) 347

ALG gene expression and cell cycle progression
M.A. Kukuruzinska and K. Lennon-Hopkins (USA) 359

The contribution of cell wall proteins to the organization of the yeast cell wall
J.C. Kapteyn, H. Van Den Ende and F.M. Klis (The Netherlands) 373

The Gas1 glycoprotein, a putative wall polymer cross-linker
L. Popolo and M. Vai (Italy) 385

Information for Contributors *vii*

Regular papers

Ups and downs of protein crystallization: studies of protein crystals by high-performance capillary electrophoresis
J. Sedzik, R. Zhang and S. Hjertén (Sweden) 401

Manganese-containing superoxide dismutase and its gene from *Candida albicans*
G. Rhie, C.-S. Hwang, M.J. Brady, S.-T. Kim, Y.-R. Kim, W.-K. Huh, Y.-U. Baek, B.-H. Lee, J.-S. Lee and S.-O. Kang (South Korea) 409

Pharmacokinetics and disposition characteristics of recombinant decorin after intravenous injection into mice
H. Masuda, Y. Takakura and M. Hashida (Japan) 420

NMR study of the metabolic ^{15}N isotopic enrichment of cyanophycin synthesized by the cyanobacterium *Synechocystis* sp. strain PCC 6308
C. Suarez, S.J. Kohler, M.M. Allen and N.H. Kolodny (USA) 429

Isolation and identification of three bactericidal domains in the bovine α-lactalbumin molecule
A. Pellegrini, U. Thomas, N. Bramaz, P. Hunziker and R. von Fellenberg (Switzerland) 439

Assessment of the effects of cetypyridium chloride on water content of the collagen-keratocyte matrix of the mammalian corneal stroma ex vivo
M.J. Doughty (UK) 449

Range of activity and metabolic stability of synthetic antibacterial glycopeptides from insects
R. Hoffmann, P. Bulet, L. Urge and L. Otvös Jr. (France, USA) 459

Identification of a human cDNA encoding a novel protein structurally related to the yeast membrane-associated metalloprotease, Ste24p
H. Kumagai, Y. Kawamura, K. Yanagisawa and H. Komano (Japan) 468

EPR spin trapping and 2-deoxyribose degradation studies of the effect of pyridoxal isonicotinoyl hydrazone (PIH) on $^{\bullet}OH$ formation by the Fenton reaction
M. Hermes-Lima, N.C.F. Santos, J. Yan, M. Andrews, H.M. Schulman and P. Ponka (Brazil, Canada) 475

Relative quantification of glycated Cu-Zn superoxide dismutase in erythrocytes by electrospray ionization mass spectrometry
M. Saraswathi, T. Nakanishi and A. Shimizu (Japan) 483

Enhanced gluconeogenesis and hepatic insulin resistance in insulin-like growth factor binding protein-1 transgenic mice
K. Rajkumar and L.J. Murphy (Canada) 491

Cell adhesion activity for murine carcinoma cells of a wheat germ 55-kDa protein with binding affinity for animal extracellular matrix proteins
Y. Shoji, Y. Aoyagi, T. Kawakami, S. Isemura and M. Isemura (Japan) 498

Tissue-specific distribution of breast-muscle-type and leg-muscle-type troponin T isoforms in birds
F. Kimura, K. Nakada, I. Yonemura, T. Hirabayashi and J.-I. Miyazaki (Japan) 505

Amino acid residues involved in the catalytic mechanism of NAD-dependent glutamate dehydrogenase from *Halobacterium salinarum*
F. Pérez-Pomares, J. Ferrer, M. Camacho, C. Pire, F. LLorca and M.J. Bonete (Spain) 513

Cumulative Contents, Vol. 1426 526

Author Index 529